

US-PAT-NO: 5807241

DOCUMENT-IDENTIFIER: US 5807241 A

TITLE: Bendable tube and method for its manufacture

DATE-ISSUED: September 15, 1998

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP |
|--------------------|---------------|-------|-----|
| CODE COUNTRY | | | |
| Heimberger; Rudolf | Oberderdingen | N/A | N/A |
| DE | | | |

ASSIGNEE INFORMATION:

| NAME | CITY | STATE | ZIP |
|------------------------|-------------|-------|-----|
| CODE COUNTRY TYPE CODE | | | |
| Richard Wolf GmbH | Knittlingen | N/A | N/A |
| DE 03 | | | |

APPL-NO: 08/ 711834

DATE FILED: September 10, 1996

FOREIGN-APPL-PRIORITY-DATA:

| COUNTRY | APPL-NO | APPL-DATE |
|---------|--------------|---------------|
| DE | 195 35 179.7 | September 22, |
| 1995 | | |

INT-CL: [06] A61B001/00

US-CL-ISSUED: 600/142;600/139

US-CL-CURRENT: 600/142; 600/139

FIELD-OF-SEARCH: 600/138; 600/19 ; 600/141 ; 600/142 ;
600/144 ; 138/118
; 138/120 ; 138/155 ; 138/166 ; 138/167 ; 138/168

REF-CITED:

| PAT-NO | | ISSUE-DATE | U.S. PATENT DOCUMENTS PATENTEE-NAME |
|---------|-------------|------------|--|
| | US-CL | | |
| 3266059 | August 1966 | | Stelle |
| N/A | 600/141 | N/A | |
| 4108211 | August 1978 | | Tanaka |

| L Number | Hits | Search Text | DB | Time stamp |
|----------|--------|--|---|---------------------|
| 1 | 784 | (403/220,291).CCLS. | USPAT; US-PGPUB | 2002/08/12 07:58 |
| 2 | 364 | (403/220).CCLS. | USPAT; US-PGPUB | 2002/08/12 07:58 |
| 3 | 466 | (403/291).CCLS. | USPAT; US-PGPUB | 2002/08/12 07:59 |
| 4 | 0 | ("3 not 2").PN. | USPAT; US-PGPUB | 2002/08/12 07:59 |
| 5 | 420 | ((403/291).CCLS.) not ((403/220).CCLS.) | USPAT; US-PGPUB | 2002/08/12 08:01 |
| 7 | 6 | ((403/291).CCLS.) not ((403/220).CCLS.) and articulation | USPAT; US-PGPUB | 2002/08/12 08:03 |
| 8 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and endoscop\$2 | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 9 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and laproscopic | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 10 | 0 | ((403/220).CCLS.) not ((403/291).CCLS.) and laproscopic | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 11 | 0 | ((403/220).CCLS.) not ((403/291).CCLS.) and endoscop\$2 | USPAT; US-PGPUB | 2002/08/12 08:07 |
| 12 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and matsuura | USPAT; US-PGPUB | 2002/08/12 08:07 |
| 13 | 1738 | Matsuura.inv. | USPAT; US-PGPUB | 2002/08/12 08:08 |
| 14 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and Matsuura.inv. | USPAT; US-PGPUB | 2002/08/12 08:08 |
| 15 | 1 | Matsuura.inv. and articulation | USPAT; US-PGPUB | 2002/08/12 08:09 |
| 16 | 1 | ("5143475").PN. | USPAT; US-PGPUB | 2002/08/12 08:10 |
| 17 | 1 | | USPAT | 2002/08/12 08:10 |
| 18 | 1 | | USPAT | 2002/08/12 08:10 |
| 19 | 1 | | USPAT | 2002/08/12 08:11 |
| 20 | 1 | | USPAT | 2002/08/12 08:11 |
| 21 | 1 | | USPAT | 2002/08/12 08:12 |
| 22 | 1 | | USPAT | 2002/08/12 08:12 |
| 23 | 1 | | USPAT | 2002/08/12 08:13 |
| 24 | 1 | | USPAT | 2002/08/12 08:13 |
| 6 | 318 | ((403/220).CCLS.) not ((403/291).CCLS.) | USPAT; US-PGPUB | 2002/08/12 08:19 |
| 26 | 114661 | articulat\$3 | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:20 |
| 27 | 7698 | articulat\$3 and (surgical or medical or surgery) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:22 |
| 28 | 1408 | (articulat\$3 and (surgical or medical or surgery)) and (endoscop\$2 or laproscopic\$2) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:25 |
| 29 | 376 | ((articulat\$3 and (surgical or medical or surgery)) and (endoscop\$2 or laproscopic\$2)) and (joints or segments) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:53 |

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|----|-----|--|--------------------|---------------------|
| 30 | 1 | | USPAT | 2002/08/12 08:38 |
| 31 | 1 | | USPAT | 2002/08/12 08:39 |
| 32 | 1 | | USPAT | 2002/08/12 08:40 |
| 33 | 1 | | USPAT | 2002/08/12 08:42 |
| 34 | 1 | | USPAT | 2002/08/12 08:45 |
| 35 | 1 | | USPAT | 2002/08/12 08:45 |
| 36 | 59 | (600/140).CCLS. | USPAT; US-PGPUB | 2002/08/12 08:58 |
| 38 | 0 | ("37 not 36").PN. | USPAT; US-PGPUB | 2002/08/12 08:58 |
| 37 | 70 | (600/141).CCLS. | USPAT; US-PGPUB | 2002/08/12 09:36 |
| 43 | 0 | ("42 not 37").PN. | USPAT; US-PGPUB | 2002/08/12 09:36 |
| 44 | 0 | ("42 not 36").PN. | USPAT; US-PGPUB | 2002/08/12 09:36 |
| 42 | 177 | (600/139).CCLS. | USPAT; US-PGPUB | 2002/08/12 09:40 |
| 45 | 165 | ((600/139).CCLS.) not ((600/140).CCLS.) | USPAT; US-PGPUB | 2002/08/12 09:41 |
| 46 | 148 | ((600/139).CCLS.) not ((600/140).CCLS.) not ((600/141).CCLS.) | USPAT; US-PGPUB | 2002/08/12 09:41 |

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| 1 | 784 | (403/220,291).CCLS. | USPAT; US-PGPUB | 2002/08/12 07:58 |
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| 3 | 466 | (403/291).CCLS. | USPAT; US-PGPUB | 2002/08/12 07:59 |
| 4 | 0 | ("3 not 2").PN. | USPAT; US-PGPUB | 2002/08/12 07:59 |
| 5 | 420 | ((403/291).CCLS.) not ((403/220).CCLS.) | USPAT; US-PGPUB | 2002/08/12 08:01 |
| 7 | 6 | ((403/291).CCLS.) not ((403/220).CCLS.) and articulation | USPAT; US-PGPUB | 2002/08/12 08:03 |
| 8 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and endoscop\$2 | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 9 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and laproscopic | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 10 | 0 | ((403/220).CCLS.) not ((403/291).CCLS.) and laproscopic | USPAT; US-PGPUB | 2002/08/12 08:04 |
| 11 | 0 | ((403/220).CCLS.) not ((403/291).CCLS.) and endoscop\$2 | USPAT; US-PGPUB | 2002/08/12 08:07 |
| 12 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and matsuura | USPAT; US-PGPUB | 2002/08/12 08:07 |
| 13 | 1738 | Matsuura.inv. | USPAT; US-PGPUB | 2002/08/12 08:08 |
| 14 | 0 | ((403/291).CCLS.) not ((403/220).CCLS.) and Matsuura.inv. | USPAT; US-PGPUB | 2002/08/12 08:08 |
| 15 | 1 | Matsuura.inv. and articulation | USPAT; US-PGPUB | 2002/08/12 08:09 |
| 16 | 1 | ("5143475").PN. | USPAT; US-PGPUB | 2002/08/12 08:10 |
| 17 | 1 | | USPAT | 2002/08/12 08:10 |
| 18 | 1 | | USPAT | 2002/08/12 08:10 |
| 19 | 1 | | USPAT | 2002/08/12 08:11 |
| 20 | 1 | | USPAT | 2002/08/12 08:11 |
| 21 | 1 | | USPAT | 2002/08/12 08:12 |
| 22 | 1 | | USPAT | 2002/08/12 08:12 |
| 23 | 1 | | USPAT | 2002/08/12 08:13 |
| 24 | 1 | | USPAT | 2002/08/12 08:13 |
| 6 | 318 | ((403/220).CCLS.) not ((403/291).CCLS.) | USPAT; US-PGPUB | 2002/08/12 08:19 |
| 26 | 114661 | articulat\$3 | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:20 |
| 27 | 7698 | articulat\$3 and (surgical or medical or surgery) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:22 |
| 28 | 1408 | (articulat\$3 and (surgical or medical or surgery)) and (endoscop\$2 or laproscop\$2) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:25 |
| 29 | 376 | ((articulat\$3 and (surgical or medical or surgery)) and (endoscop\$2 or laproscop\$2)) and (joints or segements) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/08/12 08:53 |

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| 30 | 1 | | USPAT | 2002/08/12 08:38 |
| 31 | 1 | | USPAT | 2002/08/12 08:39 |
| 32 | 1 | | USPAT | 2002/08/12 08:40 |
| 33 | 1 | | USPAT | 2002/08/12 08:42 |
| 34 | 1 | | USPAT | 2002/08/12 08:45 |
| 35 | 1 | | USPAT | 2002/08/12 08:45 |
| 36 | 59 | (600/140).CCLS. | USPAT; US-PGPUB | 2002/08/12 08:58 |
| 38 | 0 | ("37 not 36").PN. | USPAT; US-PGPUB | 2002/08/12 08:58 |
| 37 | 70 | (600/141).CCLS. | USPAT; US-PGPUB | 2002/08/12 08:58 |

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|-------------|--------|--|---|---------------------|
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| 5 | 420 | ((403/291).CCLS.) not ((403/220).CCLS.) | USPAT; US-PGPUB | 2002/08/12 08:01 |
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| 36 | 59 | (600/140).CCLS. | USPAT; US-PGPUB | 2002/08/12 08:58 |
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| 37 | 70 | (600/141).CCLS. | USPAT; US-PGPUB | 2002/08/12 08:58 |